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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,356	10/16/2001	Yasuo Tabuchi	01-220	3375

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EXAMINER

BINDA, GREGORY JOHN

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 12/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,356

Applicant(s)

Tabuchi et al

Examiner

Greg Binda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Dec 4, 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above, claim(s) 4-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Oct 16, 2001 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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Election/Restriction

1. Applicant's election without traverse of Species I (Figs. 1-7) in Paper No. 4 is acknowledged.
2. Claims 4-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 4.

Drawings

3. The drawings are objected to because:
 - a. In Fig. 2 the cross hatching pattern for resin (see page 18, line 26) annular portion 13c is incorrect. See MPEP 608.02 for the correct pattern.
 - b. In Fig. 5, the projections on center hub 13 should be identified by reference numeral 13b, not 13d. See page 19, line 6.
 - c. The drawings fail to show "a load direction" as recited in claim 3.
4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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Specification

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 U.S.C. § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2 & 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The term "mainly" in claim 2, lines 10 & 12 and the term "nearly" in claim 3, line 6 are relative terms which render the claims indefinite. The terms "mainly" and "nearly" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

b. Claim 3 recites the limitation, "the hole reduces a cross section area in a cross section nearly perpendicular to a load direction". It is not clear where this "load" is directed and so the claim is indefinite. For the remainder of this action it is assumed that any torque transmitting

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member having a hole with a circumferential cross section which is less than its radial cross section (like hole 14a shown in Fig. 4) reads on this limitation.

Claim Rejections - 35 U.S.C. § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Britz, DE 1 575 752. Figs. 1 & 2 show a torque transmitting apparatus for transmitting torque from a driving source to a rotary device, comprising: a first rotor 1 rotating upon receipt of the torque from the driving source; a second rotor 2 connected to a rotating portion 5 of the rotary device and rotating together with the rotating portion; and a torque transmitting member 3 for transmitting the torque the first rotor 1 has received to the second rotor 2, the torque transmitting member being deformable elastically (see "resilient" in line 3 of the English language abstract). Fig. 2 shows that the torque transmitting member is made of rubber or an elastomer. Fig. 1 shows that torque transmitting member 3 has a hole 4 with a circumferential cross section which is less than its radial cross section.

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10. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Goldschmidt et al, GB 557,703. Figs. 1 & 2 show a torque transmitting apparatus for transmitting torque from a driving source to a rotary device, comprising: a first rotor 'c' rotating upon receipt of the torque from the driving source; a second rotor 'd' connected to a rotating portion of the rotary device and rotating together with the rotating portion; and a torque transmitting member 'g' for transmitting the torque the first rotor 'c' has received to the second rotor 'd, the torque transmitting member being deformable elastically. On page 2, line 80 the torque transmitting member 'g' is disclosed as being made of rubber. Fig. 1 shows that torque transmitting member 'g' has a hole 'h' with a circumferential cross section which is less than its radial cross section.

11. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Reich, US 2,924,082. See Fig. 11.

12. Claims 1 & 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Reichardt, US 4,795,402. Fig. 1 shows a torque transmitting apparatus for transmitting torque from a driving source (see "input shaft" in col. 3, line 35) to a rotary device (see "another drive element" in col. 3, line 43), comprising: a first rotor 1 rotating upon receipt of the torque from the driving source; a second rotor 2 connected to a rotating portion 4 of the rotary device and rotating together with the rotating portion; and a torque transmitting member 10 for transmitting the torque the first rotor 1 has received to the second rotor 2, the torque transmitting member being deformable

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elastically (see “resilient” in col. 3, line 60). In col. 4, lines 27-31, the torque transmitting member 10 is disclosed as deformed mainly by a flexural deformation when an amount of deformation is less than a predetermined amount. In col. 4, lines 32-38, the torque transmitting member 10 is disclosed as deformed mainly by a compressive deformation when the amount of deformation is greater than the predetermined amount. In col. 4, lines 39-57, the elastic modulus of the torque transmitting member 10 at the amount of deformation over the predetermined amount is disclosed as larger (see “high torsional stiffness” in line 57) than at the amount of deformation below the predetermined amount (see “very low torsional stiffness” in line 43).

13. Claims 1 & 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Boole, US 3,345,831. Figs. 1 & 2 show a torque transmitting apparatus for transmitting torque from a driving source 1 to a rotary device 2, comprising: a first rotor 4 rotating upon receipt of the torque from the driving source 1; a second rotor 7 connected to a rotating portion 6 of the rotary device 2 and rotating together with the rotating portion 6; and a torque transmitting member 14 for transmitting the torque the first rotor 4 has received to the second rotor 7, the torque transmitting member 14 being deformable elastically (see col. 2, lines 34-36). In col. 4, lines 59-69, the torque transmitting member 14 is disclosed as deformed mainly by a flexural deformation when an amount of deformation is less than a predetermined amount. In col. 4, lines 69-73, the torque transmitting member 14 is disclosed as deformed mainly by a compressive deformation when the amount of deformation is greater than the predetermined amount. In col. 4, lines 59-73,

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the elastic modulus of the torque transmitting member 14 at the amount of deformation over the predetermined amount is disclosed as larger (see "stiff" in line 73) than that at the amount of deformation below the predetermined amount (see "soft" in line 69).

14. Claims 1 & 2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by any one of Tone, US 4,328,879 and Kern et al, US 6,045,448.

15. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by any one Spicer, US 1,504, 279; McFarland, US 2,446,942; and Braithwaite, US 3,505,832.

Conclusion

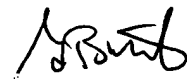
16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Johen, Bastow, Daimler-Benz each show a torque transmitting device. JP 47-45989 shows ribber member 2 with a hole 3..

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached Monday through Thursday from 9:30 am to 7:00 pm. The examiner can also be reached on alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne, can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 (before final), (703) 872-9327 (after final) and (703) 872-9325 (customer service).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



GREGORY J. BINDA
PRIMARY EXAMINER